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EXAMINER
HOMAYOUNMEHR, FARID

ART UNIT	PAPER NUMBER
2132	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

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		Application No.	Applicant(s)
Office Action Summary		10/083,236	OGG ET AL.
		Examiner	Art Unit
		Farid Homayounmehr	2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>03 August 2007</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,3-23 and 25-37* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,3-23 and 25-37* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

    1. ☐ Certified copies of the priority documents have been received.

    2. ☐ Certified copies of the priority documents have been received in Application No. _____.

    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>multiple</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to amendments filed 8/3/2007.

2. Claims 1, 3-23, 25-37 are pending in the case.

Response to Arguments

3. Applicant's argument relative to allowability of the pending claims has been considered. Response to applicant's arguments is as follows:

Rejection under section 112:

Rejection under section 112 second paragraph is overcome by applicant's amendments.

Applicant's argument with respect to rejection under section 112 first paragraph has been found non persuasive. Applicant points out to specification page 59 lines 12-15 and page 60, line 16 to page 61, line 16 in support for the amendments. The cited parts provides support for at least three or more predetermined states, and for **performing operations** based on the state of the data record. However, the claimed invention requires **commands to be executed** based on the state. Therefore, the rejection under

section 112 first paragraph has not been overcome. Note that if applicant equates

performing operations with executing commands, then the cited portions provide

sufficient support for the claimed invention.

Rejection under section 102(e):

Applicant argues that Cordery shows only two states indicated by the data element,

while the amended claims require at least three states shown by the data element. In

view of this argument, a new grounds of rejection is presented.

Applicant further argues that freshness data is not equivalent to a data element that

determines what commands can be performs. Applicant argues: "*According to Cordery,

this freshness data is "data [not data record] that is unique for each transaction."*

However, the claim requires a data element indicating the state of the data record.

Therefore, the claimed language also requires "data" to be a representative of the state.

Applicant further argues: "*Moreover, "the meter box compares freshness data that is

stored in meter box for each meter account to freshness data stored as part of the

meter record. (Col. 9, lines 49-54 emphasis added.). In Cordery's system "if the

compared freshness data are not identical [meaning the actual data content is being

compared], then, at step 230, the meter box ends the transaction and alerts the

Function Server 34 for possible tampering." (Col. 9, lines 59-62, emphasis added.). It is*

clear from the above description that first, the freshness data of Cordery is not the same

as the claimed "data element," second, this freshness data does not and can not allow

"only a predetermined type of commands... to be executed on the data record [meter

data, according to Cordery]." However, it is not clear how Comparing the freshness

state of the record with the freshness data stored in the meter box shows that freshness

data does not and can not allow only a predetermined type of commands to be

executed. As shown in Fig. 4 and associated text, once the freshness data is verified

many operations are performed, and if it is not verified, the transaction ends (no further

operations performed). Therefore, Cordery's freshness state does determine if certain

operations can be performed or not.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5.   Claims 1, 3-23 and 25-37 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the written description requirement. The claim(s) contains subject

matter, which was not described in the specification in such a way as to reasonably

convey to one skilled in the relevant art that the inventor(s), at the time the application

was filed, had possession of the claimed invention. Applicant has not identified portions

of specification in support of the new limitation: "wherein only a predetermined type of

commands are allowed to be executed on the user transaction data record" and

"executing one or more commands that are allowed for a present state of the user

transaction data record." Applicant cited portions of the specification that supports

controlling operations to be performed based on the state of the data record. Examiner

notes that the amendments removed control of performing operations, and replaced it

with control of execution of commands. The specification does not support execution of

commands or any description that distinguishes execution of commands from

performing operations.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claim 1, 3-23 and 25-37 rejected under 35 U.S.C. 103(a) as being unpatentable

over Cordery (US Patent No. 6,466,921, filed 6/12/1998), and further in view of Lewis

(US Patent No. 6,233,565, filed 2/13/1998)

7.1.   As per claims 1 and 22, Cordery is directed to a system and method for providing

public key infrastructure security in a wide area computer network (Fig. 1 and abstract),

comprising: a user terminal (Fig. 1, item 20 and associated text) coupled to the

computer network (Fig. 1); a user transaction data record assigned to a user (col. 8

lines 17-24, the meter record is assigned to a user), wherein the user transaction data

record includes a data element indicating three or more predetermined states for the

user transaction data record, wherein only a predetermined type of commands are

allowed to be executed on the user transaction data record for each predetermined

state (Cordery's col. 8 lines 17-24 shows that the freshness of the data record is

verified. Freshness describes two states of being fresh or not being fresh. Col. 4 lines

34-43 or col. 9 lines 40-58 shows using freshness to determine whether a transaction

can be performed or not. Note that implementing the freshness state of the data record

inherently requires a data element to indicate the state. Cordery shows controlling

operations based on two states, but does not show controlling operations based on

three or more states. Lewis col. 23 line 64 to col. 25 line 60 shows controlling operations

according to three or more states. At the time of invention, it would have been obvious

to the one skilled in art to enhance Cordery's system according to teachings of Lewis,

and perform operations control based on more than two states. The combination would

have been obvious because Cordery and Lewis are analogous art, as they are both

directed to security and control of Postal Secure Device (PSD) transactions (see Lewis

col. 3 line 57 to 66 and Cordery col. 3 line 65 to col. 4 line 15) The motivation to do so

would have been to improve flexibility and finer control of transactions); a private key,

and a public key assigned to a user for authenticating the user transaction data record

(col. 8 lines 17-24, where the Function Server verifies the signature of the meter record,

and therefore authenticating the meter (transaction data) record) when the user

registers with the system using the user terminal (col. 6, line 49 to 56, note that Fig. 1

item 38 and associated text shows how keys are generated. Also note that col. 10 line

20-27 suggests use of public and private keys as an alternative); a database remote

from the user terminal for securely storing the transaction data record in the user

transaction data record assigned to the user (Fig. 1, item 36 and associated text. Note

that per col. 6, line 36-44, all keys related to users and their accounts are stored in the

database); and a cryptographic device remote from the user terminal and coupled to the

computer network including a computer executable code (column 7 lines 7 to 17, and

"boxes" as shown in Fig. 1 and associated text) for signing the data in the user

transaction data record utilizing the stored private key in the database (col. 8, lines 25-

29), and for executing one or more of commands that are allowed for the present state

of the user transaction data record (Cordery teaches using freshness to determine

whether a transaction can be performed or not (see for example col. 4 lines 34-43 or

col. 9 lines 40-58)) .

7.2.   Claim 2 is cancelled.

7.3.   As per claim 3, Cordery is directed the system of claim 1, wherein the private key

is encrypted when it is stored in the database (column 8 lines 29 to 30).

7.4.   As per claim 4, Cordery is directed the system of claim 2, wherein a respective

security device transaction data related to the user is loaded into a cryptographic device

when the user requests a service (col. 8 lines 8-28).

7.5.   As per claims 5-10, Cordery is directed the system of claim 1, wherein the

cryptographic device is configured to authenticate the identity of the user and verify that

the identified user is authorized to assume a role and perform a corresponding

operation (Fig. 2, item 62 and associated text describes a mailer (user) database, that

stores related information to the user. Col. 8, lines 14-18, describes user authentication.

It is the general purpose of user authentication to determine user access rights and

roles to allow the user to perform the activities corresponding to their role)

7.6.   As per claim 11, Cordery is directed the system of claim 5, wherein the

cryptographic device includes a computer executable code for supporting multiple

concurrent users and maintaining a separation of roles and operations performed by

each user (column 6, line 14-27, indicates multiple mailers (users) can connect to the

system in the real-time).

7.7.   As per claim 12, Cordery is directed the system of claim 5, wherein the

cryptographic device stores information about a number of last transactions in a

respective internal register (disclosed by column 8 lines 19 to 25, where the data record

freshness is verified).

7.8.   As per claim 13, Cordery is directed the system of claim 12, wherein the

database stores a table including the respective information about a last transaction a

verification module to compare the information saved in the device with the information

saved in the database (column 8 line 19 to line 25, also see col. 7, lines 27-50).

7.9.   As per claim 14, Cordery is directed the system of claim 1,further comprising a

digital certificate stored in the database and assigned to a user when the user registers

with the system (column 6 line 1-5, describes sending the indicium to the user with a

token (digital certificate)).

7.10.   As per claim 15, Cordery is directed the system of claim 1, wherein the

cryptographic device is configured for digitally signing a certificate (see response to

claim 14).

7.11.   As per claim 16, Cordery is directed the system of claim 1, wherein the

cryptographic device is configured for encrypting data (see response to claim 1).

7.12.   As per claim 17, Cordery is directed the system of claim 1, wherein the

cryptographic device is configured for decrypting data (see response to claim 1).

7.13.   As per claim 18, Cordery is directed the system of claim 1, wherein the database

includes a user profile for the user (column 6 line 49 to 56).

7.14.   As per claim 19, Cordery is directed to the system of claim 18, wherein the user

profile includes username, password, account expiration, user role, logon failure count,

logon failure limit, logon time-out limit, password expiration, and password period

(column 6 lines 49-56).

7.15.   As per claim 20, Cordery is directed to system of claim 5, wherein the

cryptographic device is capable of performing one or more of DES (clearly disclosed in

column 8 line 42 to 60), Rivest, Shamir and Adleman (RSA) public key encryption,

Triple-DES, DSA signature, SHA-1, and Pseudo-random number generation algorithms

(which are comparable encryption algorithms to DES and an apparent choices to a

person skilled in the art to use as alternative methods of encryption).

7.21.   As per claim 21, Cordery is directed to system of claim 5, wherein the

cryptographic device stores information about a number of last transactions in an

internal register and compares the information saved in the register with the information

saved in a memory before loading a new transaction data (as mentioned in response to

claim 12, record freshness is checked before the transaction is allowed).

7.22.   Limitations of claims 22-37 are substantially the same as limitations of claims 1-

21 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Farid Homayounmehr whose telephone number is 571

272 3739. The examiner can normally be reached on 9 hrs Mon-Fri, off Monday

biweekly.

> If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto
> Barron can be reached on (571) 272-3799. The fax phone number for the organization where this
> application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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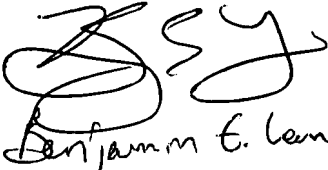information for unpublished applications is available through Private PAIR only. For

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Farid Homayounmehr

Examiner

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